Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

TITLE V PERMIT NO. F-04-023 R1
CANTON COOPERAGE, INC.
LEBANON, KY.
JUNE 26, 2006
MARTHA M. ALLMAN, REVIEWER
PLANT I.D. #: 021-155-00035
SOURCE ID #: 46439
ACTIVITY #: APE2006004

CURRENT PERMITTING ACTION: MINOR REVISION - F-04-023 R1

An application submitted by Canton Cooperage for a minor modification to their existing permit was received on May 16, 2006. This revision will increase the maximum capacity of emission Point 5, Oak Chip Production, and to add a new wood boiler and associated wood hopper. Initial oak chip production levels were based on data provided by an out-of-state oak chip production facility. Based on one year's chip production, the equipment has been determined to produce more than estimated levels. The new maximum rated capacity for processing oak chips is 20,006 tons/year, which is a 6.3 tons/year increase in emissions from the initial application. The new wood waste boiler (EP9) is rated at 3.312 mmBtu/hour and will be used to create steam for the plant. Fly-ash will be reinjected into the firebox and any remaining ash will be collected by the attached cyclone, rated at 98.4 % efficiency. A new wood waste hopper (EP8) will be used to hold sawdust and woodchips generated from the cooperage operations. A cyclone, rated at 80% efficiency, will be used to control particulate emissions.

Canton Cooperage produces charred wood barrels and chips for the wine industry. Various wood working equipment is used to produce barrel staves and wood chips. A natural gas boiler provides process heat. Wood is used to directly char the barrels while a natural gas rotary drum is used to toast the chips.

COMMENTS:

In addition to the control equipment associated with the new emission points described above, EQPT02, the cooperage operation, and EQPT3, oak chip production, are controlled by cyclones with 85% and 80% respectively. The rest of the source operates uncontrolled.

The emission factors for this source were obtained from AP-42 and FIRE. A barrel toasting particulate matter emission factor was determined through stack testing.

EMISSION AND OPERATING CAPS DESCRIPTION:

Canton Cooperage first applied for a conditional major permit with potential emissions of carbon monoxide (CO) and volatile organic (VOC) over the major source threshold, but it was noticed that the particulate matter emission factor supplied in the application would show a violation of 401 KAR 59:010, New process operations for unit COMB02. An hourly throughput limit was set to keep emissions below the allowable, however, stack testing provided a lower emission factor and the hourly throughput limit was removed.

The source shall be limited to emissions of less than 90 tons per year of a carbon monoxide and volatile organic compound emissions in order to preclude the applicability of 401 KAR 52:020. For Emissions Point 4, Cooperage Operations/Barrel Manufacturing, the maximum operating rate shall not exceed 680 tons/year of wood burned.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.